



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,880	01/14/2004	Michael R. Dennis	J-OAER.1021	5193
56703	7590	11/02/2005		
ROBERT D. VARITZ, P.C. 4915 SE 33RD PLACE PORTLAND, OR 97202			EXAMINER HOLZEN, STEPHEN A	
			ART UNIT	PAPER NUMBER
			3644	
DATE MAILED: 11/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/757,880

Applicant(s)

DENNIS, MICHAEL R.

Examiner

Stephen A. Holzen

Art Unit

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8/11/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Claims 1-5 and 11 in the reply filed on 8/11/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Response to Arguments***

2. Applicant's arguments filed 5/5/2005 have been fully considered but they are not persuasive.

Applicant's comments in paragraph three fail to point out the supposed errors in the rejection and therefor are moot.

Applicant has further argued that Sun does not disclose a "single component of electric equipment". The examiner disagrees. Sun discloses that a bleed air outlet #9 on the compressor #4 supplies compressed air for an auxiliary power system. One of ordinary skill in the art understands that Auxiliar Power system (i.e. Auxiliary Power Units, which is equivalent in structure and function to a Auxiliary Power System) is a relatively small, self contained generator (i.e. rotary turbine) used in aircraft to start the main engines, usually with compressed air, and to provide electrical power while the aircraft is on the ground. The APU can also provide electric power while in the air.

Applicant has further argued that the operating environment disclosed in this reference is absolutely limited to the mechanical power flow path provided in an aircraft

turbine engine for the working passage of intake and exhaust drive air. The examiner disagrees and refers applicant to the bleed air outlet #9 for the Auxiliary Power System.

Applicant has asserted that there is no fluid flow conduit structure extending between the intake and the discharge end. The examiner disagrees and refers the applicant to the intake #3 and the bleed air outlet #9.

Applicant has asserted that there is no filtered air flow to the A.P.U. The examiner disagrees, and refers the applicant to filter #50, 51.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sun et al. Sun discloses a system capable of being used with a rotary electrical generating device (A.P.U.: Auxiliary Power Unit/System) having an air intake (#3) spaced from the A.P.U. and capable of in-taking a flow of air when the aircraft's engine is operating;

an elongate fluid flow conduit structure having an intake end (#3) a discharge end (#9) operatively (i.e. fluidly) coupled to the A.P.U.; the bleed port connected to #9 (not specifically illustrated) are used for connecting the bleed port to the A.P.U. (see Col. 5, lines 31-32);

a filter (#50 and #51) fluidly disposed between the intake and outflow ends (the fluid conduit structure between the mesh filter and the vortex generator is a velocity modifying flow expansion chamber that reduces airflow velocity),  
the system further comprises a gravity operated liquid trap (39, 48).

It should be appreciated that A.P.U. inherently have an electrically sliding contact zones and are used for generating electricity. (see for example "Auxiliary power unit" from Wikipedia: [http://en.wikipedia.org/wiki/Auxiliary\\_power\\_unit](http://en.wikipedia.org/wiki/Auxiliary_power_unit).)

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Konrad et al (6,450,447) discloses an air intake with a filter and an APU (see Figure 2, #F, #G)
7. D.J. Jordan (2,352,790) teaches that air scoops are known in the art.
8. "Auxiliary Power Unit" – Wikipedia, the free encyclopedia: which teaches that A.P.U.s are rotary motion electric generators used on planes during flight and non-flight times.
9. Sky Geek, Ba-5110 Brackett Air filter Assembly, part number BA6108, <http://store.yahoo.com/stylepilotship/ba5110.html>

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

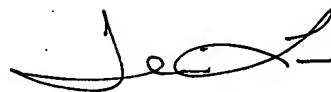
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 571-272-6903. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sah



TERI PHAM LUU  
SUPERVISORY  
PRIMARY EXAMINER